REMARKS

In the Office Action, claims 1-19 and 21 were indicated as allowed, and claim 20 was rejected. All of the claims, including claim 20 are believed to be patentable over the prior art. Reconsideration and allowance of all claims are respectfully requested for the reasons summarized below.

Claim 20 was the sole claim rejected in the Office Action. Claim 20 relates to a computer program that includes a machine readable medium and code stored on the medium for carrying out processing essentially identical to the steps recited in claim 1.

Claim 20 was rejected in view of U.S. Patent No. 6,542,570 to Silver. Silver describes a computed tomography technique in which a "virtual" fan angle is determined. As will be appreciated by those skilled in the art, the fan angle used in computed tomography imaging is the area covered by a beam emanating from a radiation source. Based upon this virtual fan angle, Silver, in certain aspects of the technique, computes weights to be applied to collected data. However, these fan angles do not correspond to the positions of a radiation source for which the weighting factors are computed in accordance with claim 20.

In particular, in column 4, Silver describes this aspect of the processing as follows:

Specifically, a system using such a virtual fan angle will include an X-ray tomograph configured to produce an exposure path of a source about an object of interest that is less than 360° but greater than 180° plus the fan angle. The virtual fan angle can be determined using either the actual angle spanned by such an orbit or a selected smaller angle still larger than the angle necessary to collect the minimal complete data set, and will be used to determine non-uniform weights for the data collected from rays through the orbit and/or to identify the rays to which such weights will be applied. The weighted data can then be used to reconstruct

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an image according to any of a number of different reconstruction

methods.

Silver, col. 4, lines 33-45 (emphasis added).

Thus, in Silver, the virtual fan angle is used to determine weights. In the

technique set forth in claim 20, on the other hand, it is the actual position of the

radiation source for multiple projections that is used for non-uniform weight factor

calculation, and subsequent back-projecting of image data. Because Silver does not

teach or suggest that use of such source positions for calculation of weighting factors

for back-projecting image data, the reference cannot support a prima facie case of

anticipation of claim 20.

Accordingly, claim 20 and the other claims pending in the application are

believed to be clearly allowable. Reconsideration and allowance of all pending

claims are respectfully requested.

Conclusion

In view of the remarks and amendments set forth above, Applicants

respectfully request allowance of the pending claims. If the Examiner believes that a

telephonic interview will help speed this application toward issuance, the Examiner

is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: $\frac{3}{3!}/2005$

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